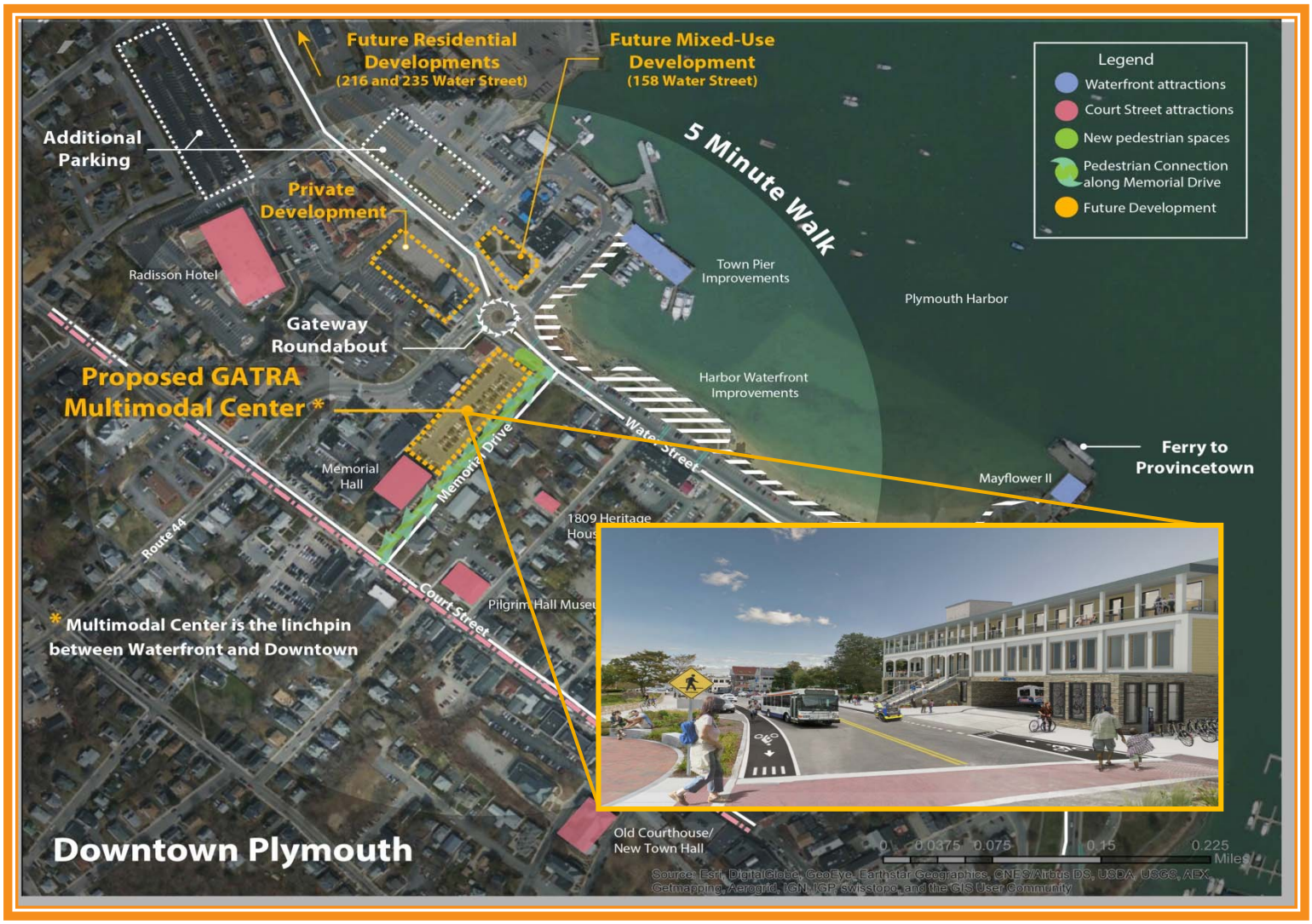
TIGER 2016 Grant Application

Plymouth Multimodal Center

Plymouth, Massachusetts
April 2016



Submitted by:
Greater Attleboro-Taunton Regional Transit Authority

In cooperation with:

GREATER ATTLEBORO–TAUNTON REGIONAL TRANSIT AUTHORITY

April 29, 2016

Secretary Anthony Foxx
U.S. Department of Transportation
1200 New Jersey Ave, SE
Washington, DC 20590
United States

Dear Secretary Foxx,

In cooperation with the Town of Plymouth, the Greater Attleboro Taunton Regional Transit Authority (GATRA) is proud to submit this application for TIGER funding to meld a revitalized downtown Business District with a historic waterfront. In partnership with the Town of Plymouth, Plymouth Growth and Development Corporation and Plymouth 400, Inc., TIGER funding will allow GATRA to construct the new Plymouth Multimodal Center.

"People Based" improvements resulting from the TIGER investment will include increased Ladders of Opportunity, additional cultural amenities and greater economic stability, and overall, will improve the quality of life for many Plymouth residents. The Plymouth Multimodal Center will ensure year round viability for the adjacent Memorial Hall entertainment venue, tourist attractions along the four hundred year old waterfront and numerous historic landmarks and businesses in the downtown. With its increased parking capacity and strategic connections between the downtown, waterfront and surrounding communities, this vibrant multimodal center will create additional economic incentives for commercial and transit-oriented development. The additional growth for businesses and expanded transportation network provide Ladders of Opportunity throughout the entire region.

Planning for this project began five years ago and has progressed from site selection through 30 percent design. Project partners have secured 50 percent of the necessary funding for final design and construction of the multimodal center. In an effort to complete the new facility with USDOT as a funding partner, GATRA and its project partners will be able to undertake timely implementation of this critically important infrastructure project.

It would be my honor and privilege to join you at the groundbreaking for this important project which will play an integral part in our great nation's historic community.

Sincerely,

Francis J. Gay
Administrator

10 Oak Street, 2nd Floor, Taunton, MA 02780-3950 • Phone (508) 823-8828 • Fax (508) 824-3474 • TDD (508) 824-7439

TABLE OF CONTENTS

Project Description 1
- What the Tiger Funds Will Support 1
- Expected Users of the Project 1
- Residents 1
- Higher Education Institutions 2
- Elderly 2
- Visitors 3

Transportation Challenges Addressed 3

The Promotion of Ladders of Opportunity 4

Project Location 5
- Detailed Description of the Proposed Project 5
- Plazas/Open Space 6
- Visitor Center and Connections to Memorial Hall 6
- Public Parking 7
- Leasable Space 7

Project Location and Its Connections to Existing Transportation Structures 7
- Project Location 7
- Connections to Existing Transportation Infrastructure 7
- Transit and Charter Bus Service 7
- Bicycle Accommodations 9
- Pedestrian Connections 9
- Ferry 10
- Commuter Rail/Intercity Bus Service 10
- Transient Boat & Water Taxi 10

Description of the National, Regional, or Metropolitan Area in which the Project is Located 10

Project Parties 11
- Transit Authority 11
- Municipality 11
- Public Corporation 12
- Tourism Partner 12

Grant Funds and Sources/Uses of Funds 12

Funding Criteria 14
- State of Good Repair 14
- Economic Competitiveness 14
- Quality of Life 16
- Environmental Sustainability 17
- Safety 19

Secondary Selection Criteria 19

Innovation 19
Partnership 20
Results of Benefit Cost Analysis (BCA) 20
Project Readiness 26
Technical Feasibility 26
Financial Feasibility 26
Project Schedule 27
Required Approvals 27
Environmental Permits and Reviews 27
Legislative Approvals 28
State and Local Planning 28
Assessment of Project Risks and Mitigation Strategies 29
Federal Wage Rate Certification 30
Supporting Documentation 30

I PROJECT DESCRIPTION

I.I WHAT THE TIGER FUNDS WILL SUPPORT

The Greater Attleboro Taunton Regional Transit Authority (GATRA) requests $14.3 million to construct a surface, multi-modal, regional transportation facility that will generate economic development and improve access to reliable, safe and affordable transportation for the region, with a 2.47:1 Benefit-Cost ratio projection.

Specifically, the Regional Multi-Modal Center will:

- Leverage more than $50 million in private investment and over $80 million in overall investment to the region.
- Facilitate an estimated $1.45 million in additional tourism spending in the first year, and additional increases each year until Plymouth's 400th commemoration in 2020.
- Support a ten percent increase in GATRA bus service, resulting in more than 175,000 net new transit riders in the first year of service.
- Offer a surface transportation hub for over six types of transportation modes to residents, students, elderly and visitors to the region.
- Provide 394 space parking garage in support of increased ferry, pedestrian, bike and boat transient transportation modes, resulting in environmental benefits and a reduced carbon footprint.
- Offer a central location for transportation transfer, in a region with more than ten higher education campuses.
- Offer a mixed-use facility, with a regional information center and commercial space to offset the cost and support new jobs and tax revenue in the region.

I.II EXPECTED USERS OF THE PROJECT

I.II.I RESIDENTS

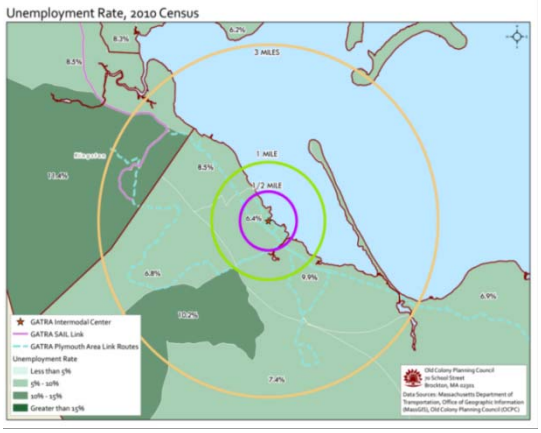
This project supports connectivity between residents to employment. True to the Federal Partnership for Sustainable Communities, the Project creates Ladders of Opportunity by investing in infrastructure to improve access to jobs, services, medical care and education while saving time, money and environmental impacts through transportation choice.

GATRA provides demand responsive service with 28,218 rides in FY2015 for the following purposes:

- *Medical 55%*
- *Jobs/Training 15%*
- *Shopping 20%*
- *Social 10%*

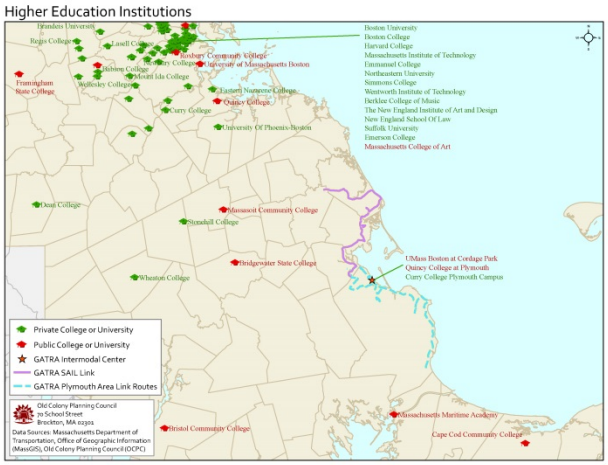
According to the 2010 U.S. Census data there was a 9.2 percent population increase in the Town of Plymouth since 2000, compared to a 3.2 percent increase in Massachusetts. The Town of Plymouth's workforce population, those between 24 and 65, grew by 19.7 percent. With over 100 square miles of land in the Town of

Plymouth, public transportation and accessibility to employment is a vital requirement for economic success.



The Town of Plymouth's population is expected to increase from 56,468 in 2010 to 71,057 in 2035.[1] In 2010, the Plymouth downtown/waterfront census block group had an unemployment rate of 6.4 percent and North Plymouth had an unemployment rate of 8.5 percent. The area south of the proposed Multimodal Center had an unemployment rate of almost ten percent, as shown in the Unemployment Rate, 2010 Census map.

I.I.II HIGHER EDUCATION INSTITUTIONS



Higher education is key to Plymouth's vibrancy. Directly within Plymouth, more than six community colleges have satellite campuses.

Three campuses are located within one-quarter mile of the Plymouth Commuter Rail Station, with Quincy College enrolling more than 1,500 students each year. The proposed Multimodal Center is located within one and a half miles of the MBTA commuter rail station.

Other community college campuses are located in the medical district, on Obery Street, while the Cape Cod Community College leases hanger space from the Plymouth airport to host their aeronautics mechanics program.

Based on work through the Higher Education Leadership Council, organized by the Plymouth Area Chamber of Commerce, the number one priority for higher educational institutions in the Plymouth region is increased public transportation.

I.I.III ELDERLY

In 2010, 13.9 percent of Plymouth County (total population: 507,022) were older than 65. In the Town of Plymouth, for the same year, over 14 percent were over the age of 65. Seven assisted living facilities are sited within a three-mile distance of the proposed Regional Multimodal Center. Agencies, non-profit organizations and elderly populations rely on the public

[1] *Comprehensive Economic Development Strategy (CEDS), Economic Development in the Old Colony Economic Development District*, prepared by Old Colony Planning Council, June 2012.

transportation system to attend medical appointments, shop, socialize and utilize other amenities in the region. In FY2015, over 55 percent of GATRA rides were related to medical trips.

I.I.IV VISITORS

In 2020, the year of Plymouth's 400 commemoration, Plymouth and the region will experience a fourfold increase in visitors from 2.1 to 6 million, over 8,000 additional jobs, and a positive economic impact four times the current visitor spending, delivering approximately $1 billion to the community and region. The Plymouth Convention Center and Visitor's Bureau estimates one million visitors to downtown attractions per year. With a tourist season of roughly five months (150 days), it is estimated that an average of nearly seven thousand people visit downtown Plymouth daily during the peak months. These visitors include a large number of international tourists who arrive via transit and boat and contribute to demand for improved multimodal transportation hub, which will allow them to transfer modes, utilizing all travel types.

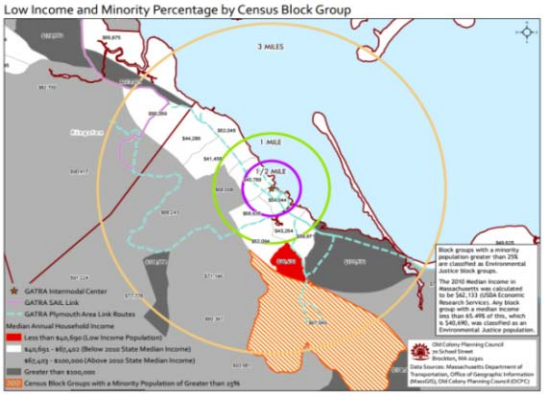
II TRANSPORTATION CHALLENGES ADDRESSED

Current Status/ Baseline & Problem to be Addressed	Change to Baseline/ Alternatives
Absence of a transportation hub to support mode connectivity and transfer within the public transportation system.	Surface infrastructure to be constructed, which will allow for residents, students, elderly and visitors to utilize more than seven-modes of transportation, increasing access to jobs, medical, shopping and social engagements.
Inadequate service delivery to meet demand.	The introduction of two new fixed routes, in addition to the existing five routes, and a Three-Season circulator.
Lack of Pedestrian and bike safety infrastructure. In Summer 2015, a visitor died on Water Street after being struck trying to cross the road.	A major reconfiguration, estimated at $15 million (funded separately), to increase pedestrian and bike safety, as well as driver safety, in the Town of Plymouth waterfront/downtown area. Improvements to include increased sidewalks, established bike lanes, increased open space and public art installations.
Limited parking amenities.	Structured parking with 394 spaces (net increase of 274) within a mixed use, multimodal development project.
Inadequate welcoming center for visitors.	Over 1,200 square foot Visitor Center.
Lack of year round employment and street level activity along waterfront area.	Over 7,000 square feet of commercial space.

III THE PROMOTION OF LADDERS OF OPPORTUNITY

According to the Old Colony Planning Council (OCPC), the Town of Plymouth experienced the largest increase in population and labor force between 2000 and 2013 in the region. This increase, of approximately 5,000 people, resulted in a workforce population increase of almost 20 percent.

Low Income and Minority Percentage by Census Block Group



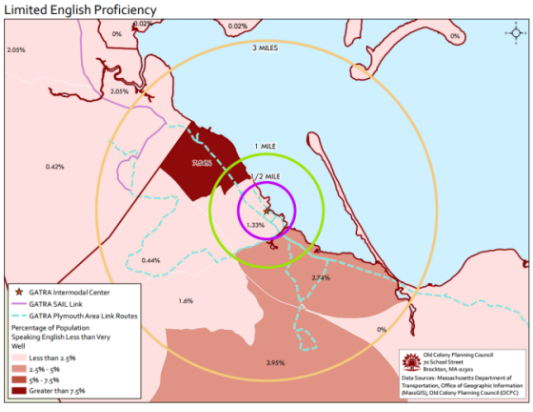
As shown in the Low Income and Minority Percentage, by Census Block Group map, all census block group within one mile of the proposed Regional Multimodal Center have a median annual household income less than the Massachusetts median income (2010).

Percent of Households Without a Vehicle

As shown in the map, one census block group, within one and a half miles of the proposed location had a median household income of $36,431, while other areas, within three miles, have a minority population great than 25 percent.

In North Plymouth, just north of the proposed downtown/waterfront location of the Regional Multimodal Center, almost one-fifth of households do not own a car, as shown in the Percent of Households Without a Vehicle. In the downtown/waterfront area, one tenth of households do not own a vehicle. Connectivity between transportation modes is key to connecting people to employment opportunities, especially with such high numbers of households with limited vehicle access.

Limited English Proficiency



As shown in the Limited English Proficiency map, the same census block groups in North Plymouth also have a low proficiency, with just less than 10 percent of the population speaking English less than very well.

South of the proposed Regional Multimodal Center, census block groups show two environmental justice areas. One environmental justice area for income, with a median annual household income of $36,431 (2010) and the other with a minority population over 25 percent. These are shown on the Environmental Justice Census Block Groups map.

Enviromental Justice Census Block Groups

In addition, areas to the south of the proposed Multimodal Center have high percentages of families receiving public assistance, with 6.8 percent, South of the downtown/waterfront region.

IV PROJECT LOCATION

IV.I DETAILED DESCRIPTION OF THE PROPOSED PROJECT

The Regional Multimodal Center is one component of a larger plan for increased economic development opportunity, safety and vitality in the Town of Plymouth and the region.

Preparing Plymouth for Success
Current and Potential Development Opportunities

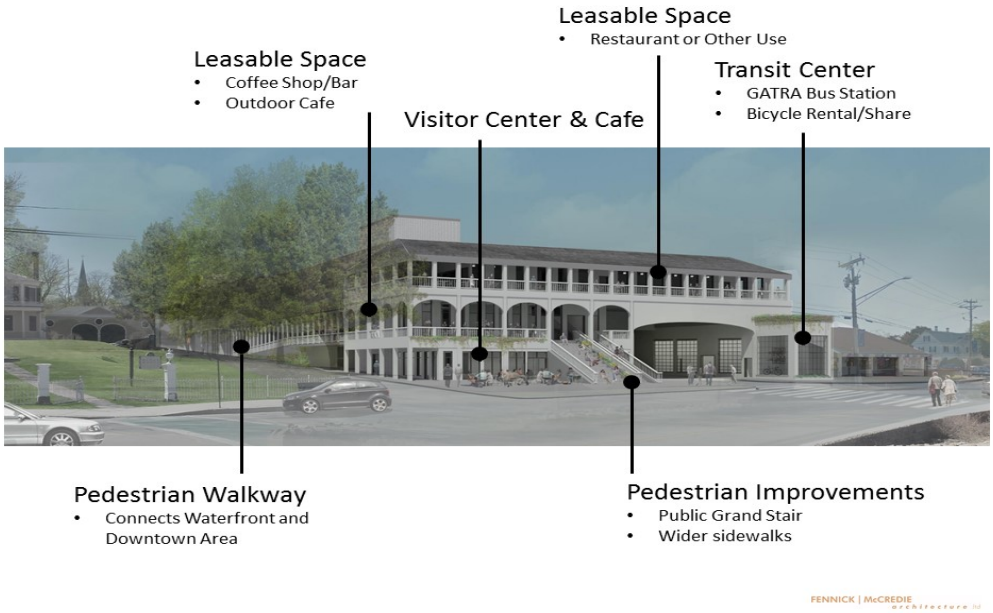
As shown in Preparing Plymouth for Success, Current and Potential Development Opportunities, the community and region has dedicated over $28M in funding to completed projects and over $83M for future projects that support economic development, vitality and safety. It is estimated that the downtown/ waterfront region of Plymouth will attract over $75M in private investment by 2020, leveraging state and federal funded projects, such as the Multimodal Center. As transportation is one of the underlying requirements for success, the main component of the overall plan is the proposed Regional Multimodal Center.

There are several aspects to the Regional Multimodal Center that will improve safety, mobility and economic development in Plymouth and across the region, including but not limited to:

- A central hub to support transportation shifts between modes, such as pedestrian, bike, ferry, shuttle, public bus and recreational boaters.

- An increase in local bus service of ten percent, to support increased mobility between residents and employment, as well as other destinations such as medical, education and other amenities.
- A visitors' center to provide information to millions of tourists that frequent the area.
- Increased parking, to support a shift in transportation modes and environmental benefits.
- Leasable commercial space, to support an increase in employment, vitality in the area, and produce income for the project.

Additional details on each of the above components can be found below.



IV.II PLAZAS/OPEN SPACE

Two new public spaces totaling over 1,000 square feet are created in the Project: a street level outdoor sitting area directly adjacent to the visitor center and public sidewalk; and a second level, covered outdoor space, where visitors and residents can look out over the historic 1809 Hedge House Museum, to the Mayflower II ship, and the marina in Plymouth Harbor. These two outdoor spaces are connected by a grand "sitting-stair" intended as a visual landmark and meeting place for locals and visitors.

IV.III VISITOR CENTER AND CONNECTIONS TO MEMORIAL HALL

The new Visitor Center will more than double in area to 1,900 square feet. The staffed center will provide referrals, reservations, maps, and local information. This will attract visitors to use the pedestrian walkways, bicycles and transit to visit more sites in Plymouth, providing an

economic stimulus of increased tourism spending. The Project will increase the year-round viability of Memorial Hall, a 1,500 seat, live performance hall owned and operated by the Town of Plymouth, supporting economic development in the downtown and improved connections to this cultural destination.

IV.IV PUBLIC PARKING

Three floors plus a roof top deck will provide a total of 394 parking spaces - a net increase of 274 spaces with the replacement of the existing surface parking lot currently occupying the Project site. The additional parking will begin to address a shortage of 400-600 parking spaces in the area well documented through a variety of reports and studies. It will also provide parking for transit, ferry and tour boat users.

IV.V LEASABLE SPACE

The Project provides for mixed-use development with unique leasable spaces of 6,800 square feet along Water Street. Not only does this buffer the scale and industrial quality of structured parking from the historic Plymouth waterfront, but helps to stitch together the urban and economic ambitions of the Project into a single identity that will enhance the growth, development, and character of the Plymouth waterfront.

V PROJECT LOCATION AND ITS CONNECTIONS TO EXISTING TRANSPORTATION STRUCTURES

The Town of Plymouth is located in the 9th Congressional District, represented by Congressman William R. Keating. It is in an Urbanized Area, as determined by the 2010 U.S. Census within the Boston Metropolitan area. Plymouth is located approximately 40 miles south of Boston.

V.I PROJECT LOCATION

With its well sited location near the east-west State Route 44, north-south State Route 3, and Plymouth Harbor, the Project is a gateway for residents, visitors, tourists, and boaters. The Project site is located at the intersection of Memorial Drive and Water Street, within a 5-minute walk of Plymouth's main street businesses and historic and waterfront attractions. The Town of Plymouth is designated by the Commonwealth of Massachusetts as an Economic Target Area (ETA), which provides tax incentives for job creation and to stimulate business growth within an Economically Distressed Area (EDA). New private development is underway along Water Street to the north of the Project site.

V.II CONNECTIONS TO EXISTING TRANSPORTATION INFRASTRUCTURE

V.II.I TRANSIT AND CHARTER BUS SERVICE

GATRA currently provides five bus routes in the Plymouth area, known as the Plymouth Area Link (PAL). Four of the routes connect at a curb-side location with a small, semi-enclosed

shelter on Memorial Drive which will be replaced by the Plymouth Multimodal Center. The number of passenger trips on GATRA PAL service increased 96 percent during the past five years, with roughly 85,000 passenger trips in FY2009 growing to 166,888 trips in FY2015. The increase in GATRA PAL transit ridership in spite of existing gaps in service, warrants more than the current condition of a single bus shelter at a curb-side location. Transit ridership is expected to increase at least five percent annually on existing routes, with demand for additional routes further driving total transit ridership. GATRA's 2015 *Regional Transit Plan* found there is high transit demand characteristics in the historic Downtown-Waterfront Area of Plymouth based on U.S. Census data (see Figure 1).

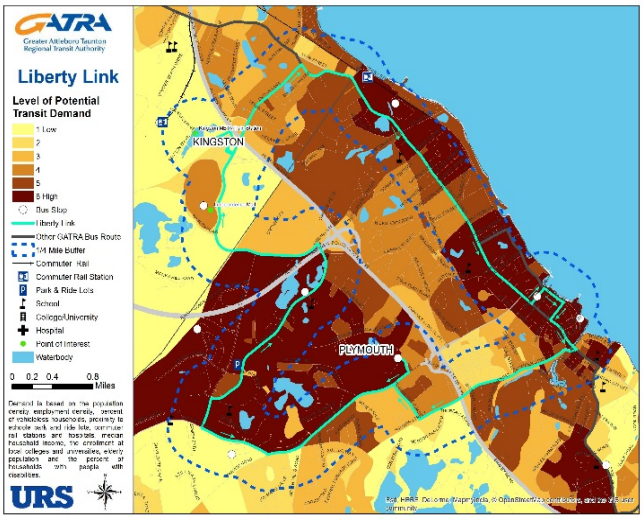


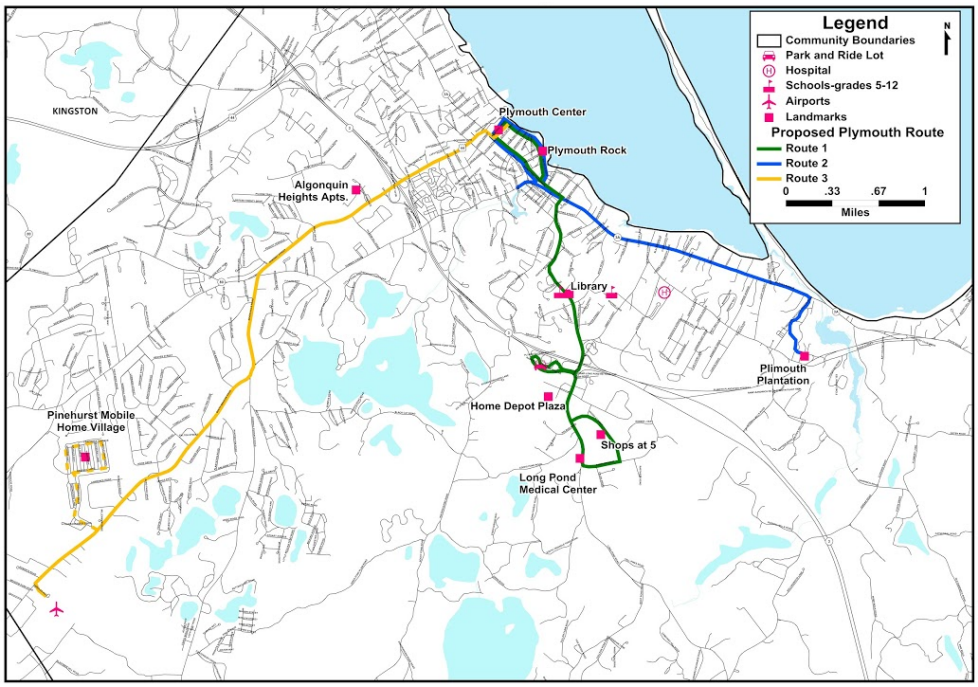
Figure 1: 2015 Regional Transit Plan Transit Demand

In the proposed Multimodal Center, three active loading and unloading bus berths will be provided on the ground floor, including two bays for queuing buses awaiting access to loading/unloading berths. The Multimodal Center provides enhanced passenger convenience, comfort, safety, and accessibility for the growing number of GATRA bus riders and better connections for shuttles to remote parking, special events, tourist traffic, and curbside space for tour buses. The Multimodal Center's off-street bus bays allows for the implementation of three additional GATRA routes long-considered for this area.

- Inter-City Connector (Route 1): Expanded service between Route 3, Long Pond Medical Center, and destinations in Plymouth, including cultural attractions and the Plymouth Public Library. This increase in service will provide better connectivity between Plymouth and Boston.
- Three-Season Circulator (Route 2): A 4-mile transit route to facilitate access among key tourist destinations within the heart of Plymouth Downtown-Waterfront Area and Plimoth Plantation, a living history museum that shows the original settlement of the Plymouth Colony. The route will operate daily during the peak summer season, and on weekends during the spring and fall.
- West Plymouth (Route 3): A connection to the airport and to new and existing housing.

The four existing fixed-route services available on Memorial Drive will operate from the Multimodal Center. These routes support mobility and ladders of opportunity for residents, students, elderly and visitors, as they tie into other transportation modes, such as the commuter rail and intercity bus, which connect Plymouth to Boston and Cape Cod within a sixty minute ride.

New GATRA routes



V.II.II BICYCLE ACCOMMODATIONS

Parking for up to 20 bicycles will be provided. An enclosed area of roughly 300 square feet will be a staging area for a local bicycle sharing/bicycle rental facility. Along with other visitors, the large population of boaters arriving in Plymouth by water contribute to demand for bicycle and transit facilities and services.

V.II.III PEDESTRIAN CONNECTIONS

A key priority for the Project is the provision of enhanced pedestrian connections between the waterfront and the business and cultural venues along Court/Main Street. Construction of a 200-foot covered walkway along Memorial Drive facilitates this connection.

A $15M initiative to enhance pedestrian, bike and vehicle safety is currently underway. The second phase of a four phase project was recently approved by Town of Plymouth's Town Meeting for $3.9M to reconstruct a portion of Water Street. Additional funding will be sourced through state and local programs.

The widened Water Street sidewalk will provide outdoor seating in front of the Visitor Center, and a grand stair to a second level public "outdoor living room" from which visitors and residents alike can relax and enjoy the harbor views and activity along Water Street. The pedestrian colonnade along Memorial Drive links the bus area and parking to Memorial Hall by

the canopied walkway. A walkway adjacent to the sidewalk provides a direct link between a raised public "living room" on Water Street to Memorial Drive and up to Memorial Hall.

In addition, a one-mile Seaside Rail Trail connects the commuter rail station site to the downtown/waterfront area. With the adoption of a shared bike program, pedestrians and bikers are able to connect from Boston to downtown Plymouth using various modes of transportation.

V.II.IV FERRY

Ferry service connects Plymouth to Provincetown on Cape Cod. The ferry service is a viable alternative for anyone traveling to the Cape who does not want to deal with summer vehicle traffic to and from the Cape.

V.II.V COMMUTER RAIL/INTERCITY BUS SERVICE

Plymouth is well served by the commuter rail operated by the Massachusetts Bay Transportation Authority (MBTA) from Boston to the Plymouth area. The MBTA service is provided from the Plymouth area into Boston seven days a week. The Plymouth & Brockton Street Railway Company runs an extensive intercity bus program connecting Plymouth with Boston, including a direct service to Logan Airport, and also many trips throughout the day to Cape Cod passing through the Plymouth terminal. Both services play a role in reducing traffic as well as promoting better air quality

V.II.VI TRANSIENT BOAT & WATER TAXI

The Plymouth harbor has become a very popular destination for summer transient boating. Also during the summer season water taxis are operated in the Plymouth harbor area.

VI DESCRIPTION OF THE NATIONAL, REGIONAL, OR METROPOLITAN AREA IN WHICH THE PROJECT IS LOCATED

Plymouth has a population of 56,468 according to the 2010 U.S. Census, and is the largest municipality in Massachusetts by land area. According to the 2009-2013 U.S. Census American Community Survey (ACS), the median income for a household in the town was $76,565 in 2013 dollars, compared to only $50,187 for the Census Tract in which the project is located. ACS data also indicate that four percent of the population in the study area take transit to work, compared to three percent for the town as a whole.

OCPC projects Plymouth's population will be 65,354 by 2020 and 71,057 by 2035, a growth rate over 25 percent from 2010 to 2035. The labor force is projected to increase from 22,869 in 2010 to 26,759 by 2035, a 17 percent growth rate.

In 2010, U.S. Census data indicate, 13.5 percent of the Plymouth County population is age 65 and over and 7.1 percent of the population lives below the poverty level. This further supports the need for transit due to the physical limitations of an aging population that force many older

Americans to stop driving, and to the financial constraints of lower income households unable to own private vehicles.

Table 1: Demographic Data

U.S. Census Data	Census Tract 5303 (Downtown-Waterfront Area of Plymouth)	Town of Plymouth	Commonwealth of Massachusetts
Population (2010)	3,782	56,468	6,547,817
Median Household Income (inflated to 2013 dollars)	$ 50,187	$76,565	$66,866
Mean Travel Time to Work (minutes)	30	33	28
Drove Alone to Work	80%	82%	72%
Transit to Work	4%	3%	9%
Walked to Work	2.4%	4.7%	4.7%

VII PROJECT PARTIES

The Project was developed by a team of organizations with strong management, financial and technical capabilities, with an established history of working in collaboration with one another to advance transportation and community development in Plymouth. Collectively, the Greater Attleboro-Taunton Regional Transit Authority (GATRA), Town of Plymouth, the Plymouth Growth and Development Corporation (PGDC), and Plymouth 400, Inc. are referred to as the "Project Parties" in this application.

VII.I TRANSIT AUTHORITY

GATRA was founded in 1974 and operates fixed route bus service in 15 cities and towns, and demand-response services for people with disabilities and seniors in a total of 28 communities south of Boston. Services include regular fixed-route buses; ADA demand response; senior dial-a-ride; and MBTA commuter shuttles. GATRA also provides brokerage transportation services for Human Services Transportation (HST). The agency's operating budget for the current fiscal year is approximately $52 million. GATRA currently provides five fixed bus routes in Plymouth, and will implement three new routes through this Project.

GATRA would be the recipient and manager of the TIGER grant, and maintain and operate the bus facility at the proposed Plymouth Multimodal Center. GATRA has an excellent long-term record of managing the construction of FTA-sponsored projects.

VII.II MUNICIPALITY

As one of the country's first settlements, Plymouth is well known in the United States for its historical value. Today, the Town uses the representative Town Meeting form of government, led by a town manager and a board of selectmen. The Town's total operating budget in FY14

was $167,752,920. The Town will provide the Project site and continue to own it upon Project completion.

VII.III PUBLIC CORPORATION

PGDC was created under Chapter 182 of the Acts of 2002 of the Massachusetts State Legislature. In addition to fostering, stimulating and developing economic growth, the Act charges the PGDC with developing, managing and operating all public on-street and off-street parking spaces in the Plymouth Downtown-Waterfront Area, which is done through a Memorandum of Agreement with the Town of Plymouth. PGDC, through an agreement with the Town of Plymouth, will own, operate and manage the Multimodal Center, with GATRA as a rent-free tenant.

V.IV TOURISM PARTNER

Plymouth 400, Inc. is a not-for-profit organization in Plymouth formed to lead the planning and execution of programs and events commemorating the 400th anniversary of the Mayflower voyage and the founding of Plymouth Colony. The Plymouth 400 Anniversary will highlight the cultural contributions and American traditions that began with the interaction of the Wampanoag and English peoples, a story that significantly shaped the building of America. Through special events and programs honoring the historic Anniversary of the Mayflower Voyage and the founding of Plymouth Colony, Plymouth 400 tells America's story of exploration, innovation, self-governance, religious freedom, and Thanksgiving; the legacies sparked by these historic events and that continue today as cornerstones of our nation. Plymouth 400, Inc. will be an integral part of the Visitor Center.

VIII GRANT FUNDS AND SOURCES/USES OF FUNDS

The proposed Project will be constructed using a mixture of funding available through the Project Parties. The use of funds is summarized in Table 2 and the source of funds are outlined in Table 3. The total Project cost is estimated to be $28.83 million in 2015 dollars, with $14.3 million, or about 50 percent, requested for TIGER Discretionary Grant Funds. Due to the multimodal transportation focus of the project, support for Ladders of Opportunity, uniqueness of the partnership and approaching 400th anniversary of our country, this Project is an ideal match for the purpose of TIGER funds. A detailed capital cost estimate in 2014 dollars is provided in Appendix A on the Project website. The 2014 estimates were escalated five percent to convert to 2015 dollars, accounting for a 1.25% increase per quarter since the estimate was prepared.

Table 2: Use of Funds

Line Item	Funding Amount	Percent of Total
Site acquisition	$ 650,000	2%
Rolling stock for new GATRA service	$ 1,230,000	4%
Hard costs of construction	$ 18,658,500	65%
Soft costs of design/permitting	$ 3,388,600	12%
Contingency to cover items excluding from the schematic design cost estimate*	$ 4,664,625	16%
Financing	$ 240,500	1%
Total	$28,832,225	2%

**Includes, if needed, hazardous materials abatement; specialized excavation; relocation of utility poles and utilities diversions; interior fit out of space; furniture, fittings and equipment (FF&E); construction management fees; owner's contingency; construction phase contingency.*

Table 3: Source of Funds

Source/Use of Funds	Cost	Percent of Total
TIGER grant to be administered by GATRA • **Hard costs of busway, transit center, and portions of site construction** • **Portion of soft costs for design and permitting** • **Contingency**	$14,300,000	50%
GATRA Federal Funding for Rolling Stock	$1,230000	4%
TOTAL FEDERAL FUNDING	*$15,530,00*	*54%*
Town of Plymouth • **Land donation**	$650,000	2%
Massachusetts Transportation Bond Bills* • **Hard costs of parking structure** • **Portion of site construction**	$8,000,000	28%
Plymouth Growth and Development Corporation (PGDC) • **Private development components (includes revenue for pre-payment of master lease for commercial space)** • **Portion of soft costs** • **Financing costs of bonds**	$4,652,225	16%

* *A transportation finance bill in 2002 (Chapter 242 of the Acts of 2012 in item 6121-1217) included $2 million toward construction of the Project. The five-year transportation financing bill (H4046) passed by the Massachusetts legislature and signed by the Governor on April 18, 2014 includes $6 million toward construction of the Project, for a total of $8 million toward the Project cost.*

IX FUNDING CRITERIA

IX.I STATE OF GOOD REPAIR

The Project supports a State of Good Repair by enhancing transportation infrastructure. TIGER assistance is requested to leverage local and state funds committed for investment to enhance Plymouth's Downtown-Waterfront Area. A State of Good Repair for transit is achieved through the Plymouth Multimodal Center by replacing a curb-side bus area in mixed traffic with an off-street bus station and an enclosed waiting area and ticket counter. The off-street, covered bus bays and waiting area will improve service reliability, passenger convenience, and the safety of the GATRA PAL routes. The relocation of GATRA buses from curb-side to off-street will reduce friction with general traffic.

GATRA buses currently serve Memorial Hall at a curb-side bus stop.

The Multimodal Center will provide a critical missing link in the transportation system that allows for the full realization of mobility benefits in Plymouth by strengthening the connection between regional transportation services and the heart of Plymouth's Downtown-Waterfront Area. New rolling stock, with greater fuel efficiency, will be acquired to provide three new transit routes.

By addressing several interrelated transportation deficiencies through the Multimodal Center, GATRA, the Town of Plymouth, PGDC, inter-city operators, and business leaders anticipate that sustainable development will be generated in the Plymouth area through improved transportation choices, downtown revitalization, and reactivation of the waterfront.

IX.II ECONOMIC COMPETITIVENESS

As announced in April 2016, one of the Region's largest employers, Entergy Pilgrim Power Station, will close no later than May 31, 2019. With over 580 people working at the plant, 190 of which live in the Town of Plymouth, the impact to the region will be significant. Over $77M in wages and benefits are earned, per year, by employees and the corporation provides over $17M in state and local taxes. Secondary impacts of the pending closure includes $105M in additional economic output, 589 jobs, and $30M in wages and benefits associated to additional jobs lost.

In preparation for this economic impact, as well as the anticipated Massachusetts 400 commemorations, where five Massachusetts communities will celebrate their 400th birthday, the Town and region must plan for success. Working in partnership with the state and the region, the Town of Plymouth is focused on strengthening connections between employers and higher education institutions. In addition, the Town is committed to strengthening existing industry, such as marine based industry and tourism.

As mentioned above, the state, region and Town are working together to implement a larger economic development plan for the downtown/waterfront region, which will support an estimated private investment of over $75M. The goal of this plan is to increase employment opportunities, tax revenue and year-round economic activity across the region. An example of one initiative included in the plan is the reconstruction of the TWharf. This $4M project will leverage a private investment over $20M related to aquaculture farming. Quincy College, a local campus, will launch their aquaculture certificate program in the Fall of 2016 and the Town is applying in partnership, with the College, to construct a $1M hatchery and laboratory. This is just one example of boosting existing industry, while strengthening linkages between employment and education. Transportation to support these linkages is the underlying foundation for establishing these connections to achieve a success outcome.

Tourism is the number one existing industry in Plymouth County. An estimated $350 million was spent by tourists in the Town of Plymouth alone in 2014, and 4,000-5,000 new tourism-related jobs will be created in Plymouth over the next five years. Transportation improvements are imperative to access these jobs and facilitate tourism spending. Mobility improvements in Plymouth enhance tourism and leverage new private sector investments that support the economic competitiveness of the United States and Commonwealth of Massachusetts. The long-term efficiency, reliability and cost-competitiveness of the harbor front Regional Multimodal Center will support economic development goals, including but not limited to:

- Increased economic vitality and business climate in community and region.
- Provide infrastructure to support an increased employment base, as well as increased visitor numbers.
- Support connectivity from one transportation mode to another, through improved access and mobility by land, water and sea.
- Establish strong public transportation service to support resident to employment connection.
- Strategically utilize public improvements to leverage private development in community and region.
- Establish and implement ‘public/private partnership’ opportunities.
- Expand employment and recreation opportunities, and international and local tourist services.

Economic competitiveness is enhanced through improved operations for GATRA bus routes. The existing and proposed routes connect downtown Plymouth to tourist attractions, employment centers, and service providers throughout Plymouth and ultimately to regional economic centers. Based on past trends, it is anticipated that ridership on the four existing GATRA PAL routes will increase five percent annually. This represents a No-build scenario for future transit ridership of 127,000 annual riders in 2015 and 147,000 in 2018. However, as a result of improved efficiencies of operation due to the Project, ridership is expected to increase by 10 percent on the existing routes the first two years following Project completion. Three new routes with daily ridership of 250 for Route 1; 350 for Route 2; and, 150 for Route 3 will be implemented in 2018.

This will generate an additional 175,000 riders on GATRA PAL service, for a total ridership of 322,255 in 2018, more than doubling the ridership for the No-build scenario.

Estimated to generate more than $1.45 million dollars in revenue during the first year, the Three Season Circulator service, will be centralized out of the Regional Multimodal Center. Destination Plymouth reports that for every dollar invested in advertising for tourism, there is $10 in revenue generated for domestic tourism and $23 for international tourism. In addition, visitors to Plymouth typically spend $25 per person in retail sales. The proposed Three Season Circulator route, to be implemented through this Project, will allow a tourist to extend their visit from the Mayflower II and Plymouth Rock on Water Street, to enjoy the attractions on Court Street/Main Street and Plimoth Planation. It is estimated that an average of two more historic sites will be visited (an average admission cost of $6.00) and one more retail location at an average of $25 per visitor.

The transportation improvements possible through this Project allow the residents in the project area to have a greater chance to access jobs that will increase their median income. The Project also improves access to higher education, further advancing Ladders of Opportunity. Curry College's Plymouth Campus, offering both Continuing Education and Graduate courses, is located a block away from the Multimodal Center site. Quincy College at Plymouth is located in Cordage Park, served by GATRA's Freedom/Liberty Link services and the MBTA Commuter Rail.

Additional jobs will be created and consumer spending dollars increased as a direct result of this Project:

- The Visitor Center's expansion will require additional staff per day during the peak season.
- Tourists visiting multiple sites could generate the need for more jobs to support those attractions and businesses.
- Hiring of seven new GATRA bus operators to accommodate the three additional planned routes.
- Construction of 6,800 square feet of leasable area for commercial use.
- Additional parking to support demand for Express Ferry service to Provincetown will increase ferry use, generating secondary benefits for the Cape Cod economy.

IX.III QUALITY OF LIFE

- Quality of life is linked to user mobility, as transportation decisions and land use are closely associated. The Project significantly enhances user mobility through the creation of more convenient transportation options, enhanced modal choice, and reduced congestion; improved accessibility and transport services for a wide range of populations; and enhanced tourism and economic development consistent with the vision presented in a range of planning studies for the Town of Plymouth. The transit-oriented, mixed use development of the Plymouth Multimodal Center further supports the community by converting an existing surface parking lot into a multimodal resource and a new landmark

on the Waterfront. The new connections created by more robust transit service and pedestrian linkages between the traditional New England downtown of Main/Court Street and historic Plymouth Harbor increases community revitalization and the efficiency of public infrastructure investments on Water Street.

- The Innovation section of this application outlines some of the smart energy choices to be included in the Project which will reduce travel times and lower travel costs, leading to a greener and more livable Plymouth.
- The net new transit riders of the GATRA PAL service are diverted from automobile trips, thereby reducing almost 650,000 annual vehicle miles travelled when new transit service is implemented and existing service operates more efficiently. It is estimated that riders save an average of 10 minutes in travel time due to more efficient operations of bus service, availability to purchase advance tickets, and transfer between bus routes. The Three-Season Circulator route encourages tourists and local employees to reduce overall travel time by taking transit rather than walking (particularly uphill from Water Street to downtown).
- The Multimodal Center itself is not expected to generate additional vehicular traffic. The proposed parking will meet existing demand for parking in the Plymouth Downtown-Waterfront Area. As such, expanded parking capacity in proximity to Memorial Hall, Town Wharf, and the State Pier (Mayflower II and ferry to Provincetown) will help reduce traffic because fewer drivers will be circling the downtown in search of a place to park during times of peak use. In addition, the Multimodal Center will be the designated hub for shuttle service to remote parking lots for special events, further reducing the need for automobiles to enter the downtown during peak periods.

IX.IV ENVIRONMENTAL SUSTAINABILITY

This Project is consistent with MassDOT's GreenDOT Policy directive established in May 2012, to design, build and operate a transportation system that supports smart growth development; and in turn facilitates travel by the healthy transportation modes of walking, bicycling, and public transit; improves air quality; preserves the environment; and enhances quality of life for all of its customers. This Project achieves all of these objectives.

A key element of GreenDOT is a statewide mode shift policy goal of tripling the share of non-auto based travel - bicycling, transit and walking - in Massachusetts by 2030. By enhancing transportation infrastructure through the Multimodal Center, the Project advances the mode shift goal by enhancing the access, convenience and availability of transit as a viable alternative to people who would otherwise travel by car. It enhances the pedestrian environment to encourage walking, and promotes bicycling. Finally, the availability of parking could result in an increase in ferry use for travel between Plymouth and Provincetown, further reducing vehicle miles travelled and reducing environmental impacts on Cape Cod.

The Project Parties are committed to an environmentally sustainable design for the Multimodal Center. The facility features a range of sustainable green building design, construction, and operation elements, and meets LEED criteria in several important areas:

Efficient Energy Use

- Lighting controls, high efficiency lighting (LED), and passive daylighting (at least 75 percent of spaces day lit)
- Daylighting controls for perimeter lighting & proposed photo-voltaic (PV) panels
- Passive ventilation

Reduced Water Quality Impacts

- Treatment of 90 percent of stormwater on-site using best management practices
- Erosion and sedimentation control plan to prevent construction activity pollution

Materials & Resource Conservation

- Post-industrial (fly-ash) admixtures into precast concrete elements and recycled steel
- Recycling of construction material (construction waste management to divert at least 75 percent of construction material from landfills)
- Use of low-emitting adhesives, sealants, paints, and coatings to improve indoor air quality

The Project site has a gradual grade and excellent waterfront access.

Sustainable Transportation

The Project improves air quality by supporting multimodal options as a means of reducing vehicle miles traveled. Based on the projection of diverted automobile trips to transit, it is estimated that 131 metric tons of carbon dioxide will be saved during the first year of the Project.

In addition to increased bus transit, the Project improves access and connectivity for walking and bicycling. Shared vehicles and bicycling on-site further supports walking and bicycling by providing those users access to a vehicle for occasional use. On-site electric vehicle charging stations will support low-emission vehicle use.

The Project will take advantage of existing transportation infrastructure by redeveloping a surface parking lot. In doing so, the Project recycles an asphalt area into the higher and better use of multimodal transportation. Finally, the improved access to jobs and additional jobs created through increased tourism, support not only the economic vibrancy of the area, but improves the quality of life and Ladders of Opportunity of individuals through increased wages and job opportunities.

IX.V SAFETY

The Plymouth Multimodal Center is critical for a more safe, connected, and accessible transportation system for the multimodal movement of people throughout the region. Regional trips between Plymouth and Boston, and Plymouth and Cape Cod, will be removed from local and state roads, and local traffic will be replaced by bus transit, shuttles, walking and biking. Ridership projections for GATRA bus service is anticipated to increase for the No-build, but increase almost fifty percent, with the Multimodal Center. The Benefit-Cost Analysis (BCA) does not attempt to quantify safety benefits associated with this anticipated mode shift. However, reduced vehicle miles traveled is closely linked with reduction in vehicle crashes and related property damage, injuries, and deaths.

The Multimodal Center design, in particular the parking element, will enhance pedestrian safety with the integration of hands free automatic vehicle identification (AVI) system for vehicle entry, which allows drivers to keep both hands on the wheel and eyes on the road during payment for parking. Consolidation of parking in the new Multimodal Center and remote lots will displace some parking demand on downtown streets, which contributes to vehicle-vehicle and vehicle-pedestrian conflicts around Plymouth's busy downtown district.

Wider sidewalks on Water Street and the covered pedestrian walkway on Memorial Drive improve pedestrian safety. The new crosswalks proposed in the Water Street Promenade project provides a safe pedestrian route between the Multimodal Center and Water Street with its numerous historic attractions.

X SECONDARY SELECTION CRITERIA

X.I INNOVATION

The Project incorporates innovative approaches to enhance the value of capital investments, and reduce the costs of operations and maintenance. Innovation is integrated within several areas of the Project:

- **Smart Card payments** – A smart card system will be implemented for both GATRA bus fare and parking fee payment. The parking payment system will utilize state-of-the-art access control system, with options to pay-by-foot and or by AVI access for permit holders. The pay-by-foot configuration reduces vehicle idle time as compared to pay-at-exit systems, and allows higher processing rates for vehicles entering or exiting the facility. The higher processing rate is particularly important given the potential for clusters of exiting vehicles associated with events. A dynamic signage system that provide drivers with real-time information on available parking spaces, will further enhance efficiency and reduce vehicle emissions.
- **Technology for Multimodal Access** – Pedestrian safety will be enhanced through use of the AVI parking payment system, as described above. GATRA will provide real-time bus arrival information through NextBus that will improve rider confidence and may increase ridership. The facility includes bicycle parking and rental facilities, as well as preferred parking for shared vehicles, and alternative fuel vehicles, including electric vehicle

charging. Finally, four parking spaces are allocated for Zip Car or other car-sharing services.

- **Green Building Design and Construction –** Green building features will be integrated into the facility, as described in the Environmental Sustainability section. The building is expected to meet LEED criteria for those items as well as for development density and community connectivity, alternative transportation, and stormwater management.
- **Green Charging Stations –** Within the last year, the Town of Plymouth has partnered with public and private partners to site more than 10 electric car charging stations within the Town. This best practice has been implemented throughout the region to support environmental goals related to reduced emissions.

X.II PARTNERSHIP

The Project includes a unique partnership of a transit agency, municipality, public corporation, and tourism partner. GATRA, PGDC and the Town of Plymouth have a proven history of collaboration. They jointly funded and conducted a site selection and feasibility study and preliminary design and engineering for the Multimodal Center.

The 2012 Site Selection Study and preliminary design have included a robust public outreach and stakeholder collaboration process. Advisory Committees consisting of representatives of the Project Partners (including multiple Town Boards, Committees and staff), Plymouth & Brockton Street Railway Company, Destination Plymouth, Plymouth Redevelopment Authority, Plymouth Antiquarian Society, OCPC, and the Southeastern Regional Planning and Economic Development District (SRPEDD) provided valuable input and guidance.

The disciplinary integration of the Project Parties will continue through final design, construction and ultimately, operation of the Plymouth Multimodal Center. The Town of Plymouth will retain ownership of the underlying land, but will lease the property to the PGDC to own and operate the Multimodal Center and lease (at no cost) to GATRA its developed space. The Town will continue to lease space to Destination Plymouth for visitor services, and the Town will continue to own and operate Memorial Hall.

XI RESULTS OF BENEFIT COST ANALYSIS (BCA)

The benefits and costs associated with the Project are estimated on a year-to-year basis, starting in 2016 at the onset of the grant award. Project construction is anticipated to begin in 2018 and be completed in 2019. The total project benefits begin immediately and increase rapidly at the completion of construction, mainly due to the projected increase in transit riders. Ridership is expected to grow, especially in the first two years after construction, due to (1) implementation of new routes to increase Ladders of Opportunities to access jobs and education, as well as increased tourism and associated benefits to the economy; and (2) increased efficiency on existing GATRA routes, making riding transit more attractive, shifting modes from private vehicles to transit, walking and bicycling in downtown Plymouth. The Project also immediately

increases the value of land at the Project site. From construction completion in 2019 through the analysis period of 2038, all of the benefits steadily increase as the anticipated growth in ridership, revenues, and inflation occurs, bringing total benefits from $5,715,337 in 2019 to $13,128,168 in 2038 (in 2016 dollars).

The BCA demonstrates that the benefits far outweigh the costs of the Project. The Plymouth Multimodal Center succeeds in generating economically competitive benefits vs. costs. The 22 year analysis period (includes 2 years of design and construction followed by 20 years post completion) results in the following costs and benefits in present dollars, when discounted at rates of 3% and 7%. This results in a substantial projected return for the $14.3 million investment of TIGER funds.

	2016 Dollars	3% Discount	7% Discount
Total Benefit	$154,981,949	$100,048,238	$59,421,371
Total Cost	$62,772,137	$49,532,804	$38,344,639
Benefit/Cost Ratio	**2.47**	**2.02**	**1.55**

The benefits accounted for in the BCA follow the TIGER criteria of State of Good Repair, Economic Competitiveness, and Quality of Life/Environmental Sustainability. Benefits primarily flow from the increase in transit riders projected as a result of the operating efficiencies of the existing four GATRA PAL routes, as well as the introduction of three additional routes. The Project will bring substantial Quality of Life and Ladders of Opportunity benefits to the Plymouth community. Transit passengers will experience travel time savings due to more bus options where they may currently be walking, increased efficiency on existing routes, and a comfortable waiting area. GATRA and the Town of Plymouth will experience increased revenue not only from the farebox, but parking facilities, commercial spaces, and tourism spending. Quality of life will increase with more job opportunities created by increased GATRA service, improved air quality, and reduced auto operating costs. Additional transit service and efficiencies would not be possible with the current infrastructure and lack of curb space, illustrating the necessity of this Project to realize these benefits.

The most apparent economic impacts of the proposed Project are the dollars spent building the infrastructure and operating the facility. The construction costs are split over three years, from 2017-2019. The Project has several upfront costs, which result in negative returns until the year after construction is complete, 2020. In addition to construction, these costs include design, rolling stock, land acquisition (although this is also considered a benefit as Plymouth is donating the land). Ongoing costs include the operating costs of transit service, the Multimodal Center, and commercial space. Financing is also an ongoing cost. As the majority of costs are upfront and are completed by 2020, the Project results in substantial benefits, as indicated by the benefit cost ratio.

Operating costs and revenues associated with the Project were developed in consultation with MassDevelopment, and are included in the BCA in Attachment 1. Assumptions regarding parking revenue, operating costs, and other factors are preliminary and will be refined as the Project progresses, but are appropriate for the 30 percent design level. Further detail regarding assumptions and methodology are described in a summary to the BCA.

Current Baseline & Problem to be Addressed	Change to Baseline/ Alternatives	Type of Impacts	Affected Population	Economic Benefit	Summary of Results	Excel Tab # in BCA
Curbside bus shelter with four GATRA PAL routes 5% annual growth in ridership	• Multimodal Center with capacity for five GATRA buses, accommodating two new fixed routes and a Seasonal Circulator. • Enclosed passenger waiting area with advanced purchase tickets	• Increased transit ridership for existing and new routes • Reduced wait time for transit connection • Reduced VMT and associated air quality benefits	• Number of new transit riders • Time savings for existing riders • Tourists able to visit more Plymouth destinations	• Monetized value of travel time and automobile operating cost savings • Emissions reductions • Increased tourism spending • Fare box revenue	**Year One:** • 175,400 net new annual transit riders (see Tab 2) • 691,641 net reduction in annual VMT (Tab 8) with an economic benefit of $8,256 in emissions reductions (Tabs 18 and 30) • $474,666 in automobile annual operating costs (Tab 9) • $1.48 million in increased tourism spending (Tab 19) • $219,249 in fare box revenue (Tab 4)	2, 4, 8, 9, 18, 19, 30
GATRA Routes to local shopping and services Service benefits those unable to transport themselves due to age, income, or health	• Three new routes • Improved operations on four existing routes	• Provide more Ladders of Opportunity • Improve access to jobs, services, and education	• Local residents and businesses • Southeastern Massachusetts residents and businesses due to connections to regional transit • 15% of GATRA demand responsive riders use the service to access jobs/training	• Quality of Life • Improved access to jobs, services and education	• Not quantified – monetary benefit of Quality of Life access to jobs, services and education • Benefits to net new riders calculated for other categories	

Memorial Drive and Water Street Sidewalks lack pedestrian amenities	• Covered walkway along Memorial Drive adjacent to the Multimodal Center • Wider sidewalks with amenities on Water Street • Memorial Hall event parking	Mobility benefits	• Users of the Multimodal Center • Visitors of Memorial Hall • Tourists travelling between the Waterfront and downtown Main St/Court St area	• Increased spending at local businesses • Fewer automobile trips resulting in air quality improvement • Improved pedestrian safety	• Not quantified – new transit riders for the Three Season Circulator route included in transit benefits • Not quantified - improved pedestrian safety from crosswalks and walkways	2
GATRA bus drivers to operate PAL routes	• Increased number of bus routes requires seven additional bus drivers.	• Job creation	• Jobs for residents of southeastern MA	• Salary and benefits for employees	• Seven full-time jobs generating $254,480 in annual benefits in the first year	20
Surface parking lot Great access to key destinations Only 120 space capacity	• Structured parking with 394 spaces (net increase of 274) within a mixed use, multimodal development center	• Increased use of transit and ferry service • Reduced traffic from vehicles circulating downtown	• Drivers • Residents and businesses in the Project area	• Increased parking revenue • Increase in land value • Reduced vehicle trips	• $712,300 in annual parking revenue in the first year • $650,000 value of donated land • Not quantified - reduction in vehicle trips circling in search of parking • Not quantified - reduction in vehicle trips to Cape Cod with increased ferry service	24, 3

600 Square foot Visitor Center	• 1,200 Square foot Visitor Center	• Increase in tourism due to information obtained on destinations in Plymouth and connections to GATRA PAL service	• Domestic and International tourists • Residents with additional jobs • Cultural venues	• Increased spending in Plymouth, resulting in stronger businesses, supporting Ladders of Opportunity, and additional tax revenue	• Not quantified – increase in tourism visits to Plymouth resulting from new and improved transit service and transportation connections • New transit riders for the Three-Season Circulator route included in transit benefits	2
Memorial Drive parking lot Lack of street level activity	• 7,000 SF of commercial space; pedestrian walkways	• Increase in business sales and associated tax revenue • Additional jobs	• Business owners • Residents with jobs	• Economic development	• Rent of leasable space generates $88,687 in revenue in the first year • Not quantified - job benefits and transfer payments supporting improved Quality of Life and Ladders of Opportunity	25
Curbside bus shelter Currently requires maintenance	• Transit center included in Multimodal Center	• State of Good Repair operating cost savings	• Transit passengers • GATRA	• Operating cost savings to GATRA	• Rent savings of $12,000 covered through non-GATRA sources due to securing TIGER towards capital costs	3

XII PROJECT READINESS

The Project Parties are highly motivated to complete construction in a timely manner. Due to the amount of planning and design work completed, the technical and financial feasibility of the Project are well established. The Project timeline allows for completion of pre-construction activities and obligates funds by no later than 2017. Due to the upcoming 400th anniversary, the Project must be completed well in advance of 2020. The Project parties are committed to meeting that timeframe due to the potential detrimental impact of loss of parking and interruption of transit service that would occur should the Project not be funded or be in the midst of construction in 2020.

XII.I TECHNICAL FEASIBILITY

The 2012 Site Selection Study concluded that the site currently occupied by the Memorial Hall parking lot is the only site in the Downtown-Waterfront Area large enough to accommodate the combined uses of the Multimodal Center, and is consistent with the recommendations in the Town's approved *2004 Strategic Action Plan* and *2006 Master Plan*. The Project will apply proven design and construction practices. No extraordinary measures will be required for its implementation. The relatively flat site allows for more options for transit layout. Preliminary engineering and critical path activities are progressing. The work completed to date includes development of design standards, geotechnical evaluation, 30 percent design plans, cost estimates, archaeological assessment, initiating the NEPA process, risk register and Project schedule. Design drawings and other supporting documentation are provided as Appendices on the Project website. The Project as proposed is technically feasible.

XII.II FINANCIAL FEASIBILITY

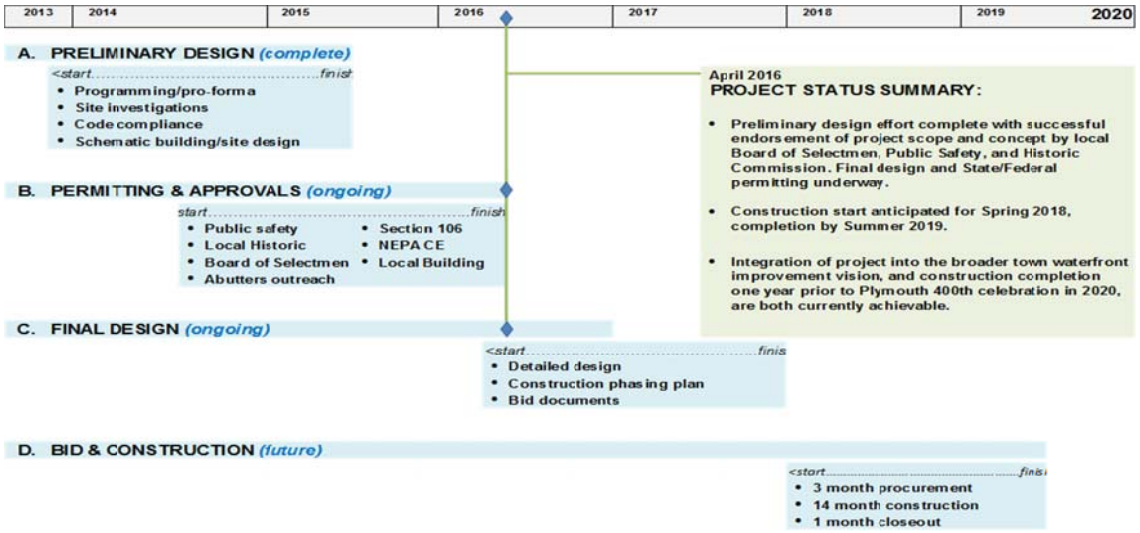
A detailed cost estimate with adequate contingency appropriate for the current 30% design level is available as part of the Project Pro Forma as attached. Total project expenditures for the project are estimated, in year of expenditure (YOE) dollars, to be $28.83 million. The Tiger Funding request is $14.3 million, which will be supplemented by local and state funding sources including land donation, Massachusetts Transportation Bond Bills, and financing through PGDC. Project Parties obtained commitments for more than half of the funding for the total cost of the Project. Using reasonable assumptions regarding finance costs and conservative estimates of parking utilization, the study concluded that the Multimodal Center can be operated as a self-supporting entity. Combining the costs, parking utilization, and leasable space it is estimated that the Multimodal Center could generate a net annual income of $34,920 in cash after debt service in Year One, indicating the Project is feasible for the foreseeable future (see Pro Formas Attachment 3).

GATRA will administer the TIGER grant. GATRA is a long-standing recipient of federal funds and has proven success of operating transit in Plymouth since 2007. GATRA is experienced with federal funding through the Federal Transit Administration (FTA) and associated Service

Outcome Agreements, Stakeholder Agreements, Buy America compliance and other requirements of federal grant agreements. PGDC and Park Plymouth have successfully managed parking in Plymouth since 2002. PGDC has entered into an Agreement with the MassDevelopment Finance Agency to provide predevelopment planning and financial services. MassDevelopment determined that the PGDC's efforts to advance job creation and economic development in the Town of Plymouth would greatly benefit from these services.

XIII PROJECT SCHEDULE

The anticipated timeline and major milestones for the Plymouth Multimodal Project are presented below. The Project timeline assumes construction will begin in the spring of 2018, with completion in the summer 2019. A detailed project schedule is provided in Appendix D on the Project website.



XIII.I REQUIRED APPROVALS

XIII.I.I ENVIRONMENTAL PERMITS AND REVIEWS

The Project is located on a previously developed site (existing parking lot) within a commercial area of Plymouth, minimizing the environmental approvals required. There are no wetlands, floodplains or other natural resource issues associated with the site. Construction of the Plymouth Multimodal Center is in keeping with existing land use and zoning requirements on land previously disturbed for transportation use. Preliminary discussion with the Federal Transit Administration (FTA) indicates the project will require National Environmental Policy Act (NEPA) Categorical Exclusion (CE) under 23 C.F.R section 771.118 (c) (9), (10) and (12). It will also comply with Section 106 of the National Historic Preservation Act and the Massachusetts Historical Commission (MHC) State Register Review.

The proposed Project is located within the Plymouth Historic District, which is listed in the State Register of Historic Places, which may be eligible for inclusion in the National Register of Historic Places. Because the Project will use federal funding, the undertaking is subject to review by the MHC under Section 106 in its federal role as the Massachusetts State Historic Preservation Office (SHPO). The MHC has review authority of projects undertaken, funded, or licensed by a state body to determine whether such project would have any adverse effect on properties listed in the State Register of Historic Places. The MHC will consider impacts of the new construction on the Plymouth Historic District. The MHC's regulations allow for the coordination of Chapter 254 review with Section 106 review. Completed review under Section 106 will fulfill compliance with Chapter 254. The initial steps of the Section 106 process have been completed successfully, which primarily involved extensive outreach and collaboration with local historic leaders during conceptual design, culminating in the Board of Selectmen endorsement in spring 2014, and in the Historic Commission endorsement to continue forward with detail design at a public meeting on May 6, 2015. On-site archeology work is scheduled for fall 2016, allowing for full submission of findings to MHC, and negotiation of a Memorandum of Agreement (MOA). The schedule for detailed design intentionally runs in parallel with the MOA negotiation so that questions regarding details of the project scope and design may be adequately addressed to facilitate a fully executed MOA. A review of MHC files indicates that there are no previously identified archaeological resources within the Project area. Therefore, due to previous development activities and disturbance, it is anticipated that the Project area under consideration is unlikely to contain significant archaeological remains. The design team and budget includes environmental and cultural resources consultants to prepare the required documentation, with UMASS Archeological Services on board for the reconnaissance survey (see Appendix C). The Project does not meet review thresholds under the Massachusetts Environmental Policy Act (MEPA) per the regulations at 301 CMR 11.00, and therefore no environmental approvals are required at the state level beyond MHC's involvement described above.

XIII.I.II LEGISLATIVE APPROVALS

The Project is supported by a wide range of stakeholders in the local community, as well as Commonwealth of Massachusetts State Senator Vinny M. deMacedo, State Representative Mathew J. Muratone, and Regional Planning Agencies (Letters of Support available on Project website). The Massachusetts Transportation Bond Bills for this Project demonstrate the support by the Commonwealth of Massachusetts.

XIII.I.III STATE AND LOCAL PLANNING

The Project is the result of a planning process that coordinated transportation, land-use planning, economic development, and historic significance. The Site Selection Study and Preliminary Design included the involvement of key stakeholders. Support for the current Project proposal is reflected in the letters of support available through the Project website.

The Project is consistent with local and state planning documents noted throughout the application. The Memorial Drive site corresponds exactly with the Town of Plymouth's *Strategic Action Plan* (2004), *Master Plan Update* (2006), and *Public Space Action Plan* (2007). These plans identified the Memorial Drive parking lot as a strong candidate for redevelopment due to its complimentary physical form and topography, potential for connection to, and screening by Memorial Hall, and its potential to serve the Downtown-Waterfront Areas. The Project is included in the *2012 Old Colony Regional Transportation Plan.* The Project is included in the current Transportation Improvement Program (TIP) Project list for fiscal years 2017 and 2018.

Local approvals to be obtained include Town of Plymouth Planning Board approval, a Special Permit from the Zoning Board of Appeals for construction over 35 feet in height, Design Review Board approval, a Certificate of Appropriateness from the Historical Commission, and a Building Permit. Coordination has been ongoing with local stakeholders and boards to identify and address potential issues through the design in advance of permitting, local approvals and design process have been sequenced to align with the NEPA and Section 106 timeline.

XIII.II ASSESSMENT OF PROJECT RISKS AND MITIGATION STRATEGIES

The Project Parties are committed to implementing this Project well completion as specified by TIGER guidelines. Potential project risks that impact the timeline are perceived to be low and easily mitigated. Medium-level risks include construction cost accelerated escalation and unforeseen delays in completing the NEPA process. These risks can be mitigated and even with a delay to the Project timeline, the Project Partners intend for the Project to be completed prior to Plymouth's 400th anniversary celebration in 2020.

Table 3. Summary of Risk Assessment

Risk Item	Perceived Likelihood	Mitigation
Site procurement delay	Low	Site owned by Town of Plymouth, a Project Party. Develop Memorandum of Agreement prior to commencement of construction.
Schedule impacts due to discovery of archeological resources.	Low	Preliminary research shows low likelihood of significant artifacts. Development of a Memorandum of Agreement with the State Historic Preservation Officer regarding mitigation measures if artifacts found during construction.
Unforeseen underground obstructions/conditions, contaminated soils	Low	Borings performed, revealed no unforeseen obstructions. Hazardous materials tests were negative.

Construction cost accelerated escalation	Medium	Continue with regular cost estimate updates/ design review.
Failure to secure remaining funding	Low	A total of $8 million signed through two Massachusetts Transportation Bond Bills. $3 million is within the bonding capacity of PGDC plus $472,500 in equity, as determined through MassDevelopment's predevelopment planning. The $1.1 million for the leasable space as a source of funding is yet to be secured. However, Destination Plymouth has indicated interest in the visitor center, and a master lessee will prepay rent to PGDC for a long-term lease on the commercial shell mitigates that the space will remain idle for an extended period of time.
Delay in obtaining NEPA approval	Medium	Anticipate meeting conditions for a Categorical Exclusion (CE) due to minimal impacts. Coordination with Federal Transit Administration (FTA) and Section 106 process to resolve issues prior to submitting CE. Collect and assess data for CE checklist and if needed use to develop an Environmental Assessment (EA).
Delay in obtaining local approvals.	Low	Town of Plymouth is a Project Party. Continued coordination with Project stakeholders and public outreach in advance of permit applications will ensure success.

FEDERAL WAGE RATE CERTIFICATION

GATRA, as a current and long-standing recipient of FTA funding, has provided certification of Federal Wage Rate Requirements in accordance with Subchapter IV of Chapter 31 of Title 40 of the United States Code (see Attachment 2).

SUPPORTING DOCUMENTATION

Please see the Project website: http://www.gatra.org/index.php/plymouth-transportation-center/ for supporting documentation referenced in this application.